DOCUMENT RESUME

ED 192 910 PS 011 734

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TITLE Resource Allocation in the Classroom: Children's Developing Understandings of Distributive Justice.
INSTITUTION Far West Lab. for Educational Research and Development, San Francisco, Calif.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
REPORT NO ETT-80-2
PUB DATE Apr 80
CONTRACT 400-80-0103
GRANT OB-NIE-G-78-0103
NOTE 17p.; Paper presented at the Annual Meeting of the American Educational Research Association (Boston, MA, April 7-11, 1980).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Classroom Environment; Classroom Research; *Comprehension; *Elementary School Students; *Justice; *Kindergarten Children; *Resource Allocation
IDENTIFIERS *Distributive Justice; Human Ecology

ABSTRACT

This discussion explores children's understanding of the nature of distributive justice in classrooms and provides an initial model for further research. The issue of distributive justice arises in a situation when an individual assesses the fairness of the distribution of any limited resource, such as the physical, instructional and social opportunities present within schools. It appears that the understanding of distributive justice by children requires that they coordinate three domains of knowledge: (1) consequences of resource allocation; (2) criteria of deservingness; and (3) schemas which define fairness. Exploratory, semi-structured interviews were conducted among 25 children in a mixed kindergarten/first grade classroom and a mixed third/fourth grade classroom. The interview data indicate that children know the consequences of resource allocation and that they also know what resources and how much of a resource they and others will receive as a result of a distribution. Criteria for deserving consist of attributes of individuals. Findings suggest that children attempt to coordinate consequences of resource allocation with criteria of deservingness. Further, children apparently employ formal reasoning as well as substantive declarations to justify the fairness of the relationship between resource allocation and deservingness. Three areas for further inquiry are specified in the conclusion. (Author/RH)

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Ecological Theory of Teaching

RESOURCE ALLOCATION IN THE CLASSROOM:

CHILDREN'S DEVELOPING UNDERSTANDINGS OF DISTRIBUTIVE JUSTICE

1980 AERA Annual Meeting
(Session 30.03)
Boston, Massachusetts

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Report ETT-80-2

The author wishes to acknowledge the support of the National Institute of Education, Department of Health, Education and Welfare. Many of the thoughts that underlie this discussion are the result of work begun under NIE Grant OB-NIE-G-78-0103 and continued under NIE Contract 400-80-0103 to the Far West Laboratory for Educational Research and Development, San Francisco, California. The opinions expressed here do not necessarily reflect the position or policy of the Institute and no official endorsement by the National Institute of Education should be inferred.

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PS011734

RESOURCE ALLOCATION IN THE CLASSROOM:

CHILDREN'S DEVELOPING UNDERSTANDINGS OF DISTRIBUTIVE JUSTICE

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As part of the Ecological Theory of Teaching Program in the Department of Schooling, Far West Laboratory, we are seeking ways to understand better the moral outcomes of schooling, and the means by which they develop in different classroom contexts. Our long-range goal is to apply this understanding to the analysis and specification of successful schooling practices. Our "ecological" focus builds upon multiple data collection strategies to take into account the structure of the classroom environment, at the same time it considers the impact of that environment on the developing cognitions of students.

In this paper, I am going to talk about one small part of our ecological effort: The developing child's understanding of the nature of distributive justice in classrooms. It hardly needs to be stated that the issues of fairness and deserving which are at the heart of distributive justice are quite salient to children. The complaint that the grades a teacher gives are not fair, or that the opportunities for help which are available are unfairly distributed among the classroom members are very real and very important to students.

The following discussion is built upon several hundred hours of naturalistic observations of the classrooms within a single elementary school, as

* I am especially grateful to the following individuals for their contributions to this paper. Doug MacBeth and Cecily Weston helped with the initial analysis of observational data. Dr. William J. Tikunoff, Principal Investigator, Ecological Perspectives for Successful Schooling Practice, and Dr. Beatrice A. Ward, Deputy Director, Far West Laboratory for Educational Research and Development, have been supportive and helpful throughout its conceptualization. Dr. Donald W. Swarthout bears special recognition as a stimulating colleague and a friendly critic.

well as on the initial analysis of interviews which we have conducted with 25 children in two classrooms: a K/1 classroom and a mixed 3/4 grade classroom. I will confine myself primarily to a consideration of the interview data which has been collected. The format of these interviews was semi-structured. Interviewers asked children to talk about their perceptions of the distributions of resources which we had observed occurring in their classrooms. The distributions chosen for discussion included the allocation of certain highly valued statuses such as that of ball monitor, the allocation of the teacher's instructional time and individual help, the allocation of turns during participation in playground games, and for the K/1 class, the allocation of snacks.

These interviews were exploratory and this paper is not reporting the findings of a carefully structured experiment. Instead, the focus is on an initial model which has been generated inductively, and which may have heuristic utility in the conduct of further research on distributive justice situations in the classroom as well as in other environmental contexts. In attempting to understand the child's daily experience of distributive justice, a "bootstrapping" approach has been adopted, in which theory development builds upon continuing research in a recursive manner. You have before you, a "bootlace," or initial foray into the complexities of distributive justice in the classroom.

The School and Distributive Justice

In watching what goes on in and around classrooms, it is evident that there is a continual occurrence of *distribution occasions*, that is, *specific events in which a limited resource is allocated to a student or a group of students on the basis of certain attributes possessed by the recipients.* When an assessment is made of the fairness of such a distribution, we have

moved within the domain of distributive justice. In the 6th grade, for example, distributive justice is not a rarefied concern of philosophers, but a very real issue concerning which two out of 28 students will get to be the ball monitors for that class. And in the kindergarten, the way in which the teacher time is allocated among twenty youngsters raises questions of distributive justice as well.

The notion of *resource* is, at this point, quite broad. It encompasses all of the means utilized by teachers, and formalized through the school environment, to bring about the cognitive, social, motor learnings, and competencies desired by those who establish educational goals. Resources include the physical, instructional and social opportunities which are present within the school environment, and which are distributed to children on the basis of various criteria of deserving. Thus in the kindergarten classroom, the status of child of the day, a position which brings attention and privileges to the child who occupies that status, is considered to be a resource. On the playground, the opportunity to participate in games and to develop motor skills is also considered to be a resource. Finally, the special attention and tutoring which some students receive is considered to be a resource. We have begun our work with a relatively undifferentiated conception of resources in order to examine how various resources may be allocated differently in different classrooms, and the impact this differential allocation may have on the child's understanding of distributive justice. With this broad notion of resources in mind, discussion moves to a consideration of the model of children's understandings of resource allocation.

A Model of Children's Understanding of Resource Allocation

Figure 1 presents a model of three domains of understanding which need to be coordinated by the child in the understanding of distributive justice. Each domain will be considered in turn.

Knowledge I: consequences of resource allocation. From the moment a child enters the classroom, he or she observes or experiences the consequences of resource allocation. The teacher may require that certain children complete additional assignments, and choose others to serve as classroom monitors. The teacher may devote more attention to some children, and sanction others more frequently. The variation in resources which are received by different students in the same classroom has been well-documented (Brophy and Good, 1974; Rist, 1978; Tikunoff and Ward, forthcoming). Once the student steps out of the classroom on to the playground, similar variations in the distribution of playground equipment and access to games occur. From the point of view of the student, it becomes evident that different resources, and perhaps more importantly different amounts of the same resource are received by different children. I talked with 10 year-old Alex about the way the teacher allocated her instructional time among students.

> DOES MRS. GREEN SPEND THE SAME AMOUNT OF TIME WITH ALL THE KIDS IN THE CLASSROOM?
>
> Yeah, most of the time she does unless one person needs a special amount of help in one thing.

In another interview, 6 year-old Yvette and I discussed the turn-taking procedure in jump rope.

> HOW MANY TURNS DO YOU GET?
>
> Three.

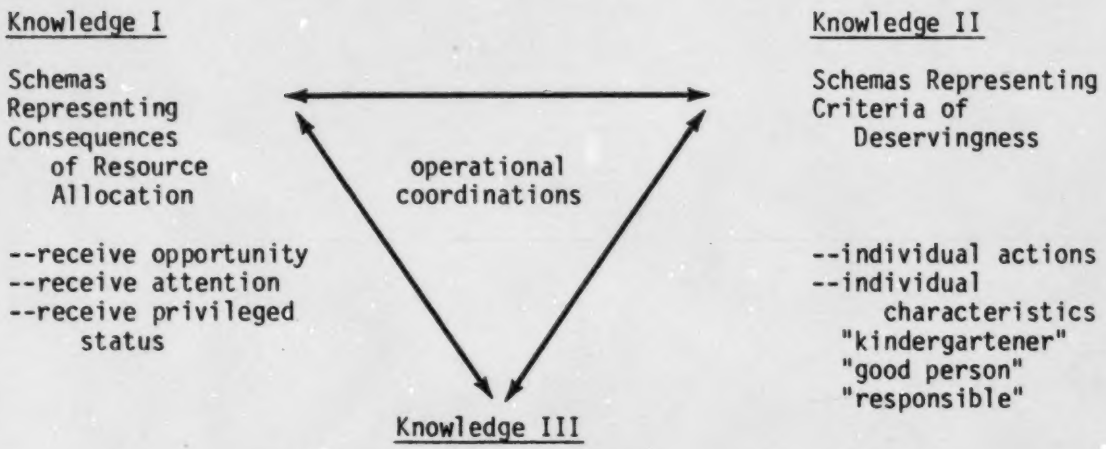

Figure 1. A model of children's understanding of resource allocation

HOW MANY TURNS DO OTHER PEOPLE GET?

Three.

WHAT IF YOU ARE REAL GOOD AND YOU DON'T MAKE ANY MISSES?

Then you keep on jumping until you get a miss, and then you have to go to the back of the line. If you are good at it, then you skip one turn.

Our interviews indicate that children are well aware of the individual consequences of resource allocations which are made by teachers and which occur naturally within a social group.

On Figure 1, the collection of schemas which make up Knowledge I are represented at the top left-hand side of the diagram. For the purposes of this paper, a schema is considered to be a routinized "chunk" of knowledge representing the individual consequences which accrue from a distribution. Thus the answers to questions like, "What happens when you are Child of the Day?" or "Does the teacher give some children more help than other children?" are Knowledge I schemas. These schemas have both a qualitative and a quantitative aspect. In the first place, they represent <u>what</u> the child receives as a result of a distribution. At the same time, they represent <u>how much</u> a child receives when compared to others.

<u>Knowledge II: criteria of deservingness</u>. A second domain of knowledge entitled Knowledge II on Figure I is represented on the top right-hand side of the model. This domain encompasses the schemas of deservingness. The concept of deserving is built upon the assumption that specific consequences, usually rewards or punishments, are earned as a result of "one's qualities or acts." These criteria of deserving draw attention to the observed or inferred attributes of the recipient on which rests the claim to allocation.

In this model of children's understanding of resource allocation, there

are two general categories of salient attributes: 1) The actions of the recipient; and 2) The personal characteristics of the recipient. Often these two general categories of attributes interpenetrate as in the case where the recipient's previous actions (e.g., doing well on a math test) become linked with the perceived characteristics of that individual (e.g., being smart in math).

These recipient attributes are linked with the behavioral consequences of a resource allocation on the basis of an operational coordination which unites a specific schema within the second knowledge domain (Knowledge II) with a schema within the first knowledge domain (Knowledge I). The word, coordination, is deliberately chosen, for our interviews suggest that children actively seek to discriminate appropriate coordinations between the schemas of Knowledge I and Knowledge II and to establish a balanced relationship in which if one schema is altered, other schemas must change as well to establish balance. Consider the apparently contradictory remarks of 6 year-old Linda. I asked her:

HOW DO YOU GET TO BE CHILD OF THE DAY?

I don't know.

HOW DO YOU THINK?

From the list.

DOES EVERYBODY GET TO BE CHILD OF THE DAY?

Yah.

DO YOU THINK THAT IS FAIR?

Yah.

DO YOU THINK NAUGHTY KIDS SHOULD BE CHILD OF THE DAY?

No.

HOW COME?

Because they're bad; they don't get a turn.

WHY NOT?

Because they were bad.

IS IT FAIR THAT THEY DON'T GET A TURN IF THEY WERE BAD?

No.

WHY IS THAT?

Because they'll skip a turn.

SO ONLY GOOD KIDS SHOULD BE CHILD OF THE DAY?

Yah.

IS THAT WHAT HAPPENS HERE AT SCHOOL?

No.

WHAT HAPPENS HERE?

If you are bad you could be Child of the Day.

BUT YOU DON'T THINK THAT IS RIGHT?

No.

ONLY GOOD KIDS SHOULD BE CHILD OF THE DAY?

Yah.

WHY IS THAT?

Now here is the most important part of this interview excerpt.

Because if they're bad, they <u>should</u> have a turn.

WHY?

Because if they be bad, they <u>shouldn't</u> have a turn.

Linda's confusion indicates the cognitive difficulty in separating six schemas and establishing the appropriate coordinations between each schema in the Knowledge I and Knowledge II domains. The first coordination associates the good kids with pleasurable consequences. The second coordination links naughty kids with punishment or with the deprivation of pleasurable consequences. The

third coordination links any kid on the list with the pleasurable consequences of being Child of the Day.

At ten years old, Terry demonstrates a much more differentiated and stable coordination of the relationship between the two domains of knowledge as she talks about the relevant attributes required to be a roll monitor. The interviewer asks her:

> SHOULD ONLY NICE KIDS BE ROLL MONITORS?
>
> No, it doesn't matter as long as everybody gets picked. It doesn't matter.
>
> IS IT OK IF BAD KIDS GET TO DO IT?
>
> Yeah.
>
> EVEN KIDS WHO GET IN TROUBLE ALOT?
>
> Well, all they got to do is take the roll to the office.

Ten year-old Debbie, however, showed some confusion about the appropriate deservingness criteria for ball monitors, associating the irrelevant schema of owning a good record with the privilege of being a ball monitor.

> HOW DO YOU BECOME A BALL MONITOR?
>
> ...see if you have a good record that you bring [to school] then you can probably be a ball monitor.
>
> IS IT FAIR THAT ONLY KIDS WITH RECORDS GET TO DO IT?
>
> Mm-mm. [no] It's not fair.
>
> WHY NOT?
>
> Because if you don't have a record you should still be a ball monitor.

Initial interviews show that there are definite attributes which come to be associated with the consequences which are received as a result of distributions

in the classroom. And not surprisingly, the coordination of consequences with the attributes which establish deserving appears to become more differentiated and complex with age.

Knowledge III: schemas which define fairness. While much research on children's concepts of fairness has focused mainly on the structural aspects of the manner in which children make judgments of fairness (e.g., Damon, 1977; Kohlberg, 1976), we are concerned with both the formal, structural aspects of the fairness justification, and the content-related or substantive assumptions which may accompany the formal fairness judgments. Our working assumption is that children's exposure to varying classroom and school environments may affect the substantive learnings about distributive justice which are an outcome of the process of socialization, and, depending upon where the conceptual line is drawn between content and structure, may influence structural understanding as well.

Formal aspects of fairness. The formal aspects of fairness include the reasons by which a child justifies a coordination between schemas in Knowledge domains I and II. Among the reasons which were reported by the limited number of children we spoke with were those which pertained to the dictates of unilateral authority, either that of the teacher, a parent, the child, or a pre-existing rule structure, or the consequences of the allocation procedure, either in terms of satisfying equally the wants of those children involved in the allocation, having a defined impact on others, or distributing equally the benefits to be derived from the allocation.

At times, our children sounded much like those interviewed by William Damon and his associates, but at other times, their responses appeared to be divergent. As we did not use Damon's interview schedule, or recreate his

distribution situation, it is intriguing that so many of our interviews with the younger children produced what looked very much like a level 1-a response, where notions of fairness center on a rigid equality. What is unclear from our interviews, however, is how much this profession of fairness as rigid equality is the sole result of cognitive development resulting from the child's ongoing interactions with the environment, or whether it was more directly a recreation of the distribution rules the children had experienced in their own classrooms. Those inclined to social-learning explanations could find some support in our observational data for the argument that children's espousal of equal distribution strategies is a direct result of the socialization practices which they experienced in the K/1 classroom. In the K/1 classroom we observed, all distributions of classroom resources in four full-day observations during the first week of school, were based on a principle of equality. Moreover, children whose behavior violated this norm of equality by taking an extra snack or an extra turn in a classroom game were negatively sanctioned by the teacher, and occasionally, were reprimanded by their fellow students as well. As our observations take us into more kindergarten and first grade settings, where a rigid egalitarianism may not prevail as the sole mode of distribution, we will be able to better understand the effect of experienced distributions modes and verbal prescription on the child's structural understanding of fairness.

Turning to the interviews which were conducted, here are several excerpts which represent the formal reasoning schemas within the domain of Knowledge III. Five and one-half year-old Gerry and I talked about the snack distribution which had just occurred, and he defined fairness according to the dictates of a unilateral authority -- his own. I asked Gerry:

WHAT ARE YOUR FAVORITE SNACKS?

Oranges.

HOW MANY ORANGES DID YOU EAT TODAY?

David [another student] gave me four.

FOUR. HOW MANY PIECES DID EVERYBODY ELSE EAT?

[Gerry holds up two fingers.]

I SEE. DO YOU THINK IT'S FAIR THAT YOU ATE FOUR AND THE OTHER PEOPLE ATE TWO?

[Gerry nods head.]

YOU DO. WHY IS THAT FAIR?

'cause I love oranges.

Here is six year-old Yvette whose definition of fairness rests on equal and mutual satisfaction of wants. I asked her:

HOW MANY CUPCAKES ARE YOU ALLOWED TO EAT?

One.

JUST ONE, HOW COME?

Because then other people get how much other persons get.

SO WHAT HAPPENS IF YOU EAT MORE THAN ONE?

The other people don't get how much I got.

WHY IS IT IMPORTANT THAT EVERYBODY GET THE SAME?

'cause that won't be fair.

WELL, WHY NOT?

Because everybody else will want how much I had.

Substantive aspects of fairness. In addition to these structural justifications of fairness which could be applied to the distribution of numerous resources and not just to the allocation of snacks, there are

substantive justifications which connote a message about the state of affairs in that classroom, or more generally, "the way the world is." Six year-old Karen expressed a substantive justification for the way in which the teacher spends her time, when I interviewed her.

DOES THE TEACHER SPEND MORE TIME WITH NAUGHTY KIDS?

Sometimes.

WHO IS NAUGHTY?

With Don and Barry.

DO YOU THINK THE TEACHER SHOULD SPEND MORE TIME WITH KIDS WHO ARE NAUGHTY?

Mm-hmm [yes].

WHY IS THAT?

Because if they are naughty, she should be spending more time with the kids who are naughty and talk with them...straighten them out.

Ten year-old Karen expressed a familiar substantive justification for the way in which a teacher should spend his or her time. I asked her:

WHO GETS TO SPEND THE MOST TIME WITH MRS. GREEN IN THE CLASSROOM?

Oh, Sherri...she always gets a lot of help.

DO YOU THINK IT'S GOOD THAT KIDS LIKE SHERRI...SPEND MORE TIME WITH MRS. GREEN?

Yeah.

WHY?

Because she needs a lot of help.

WELL WHAT DIFFERENCE DOES THAT MAKE?

Well, that's what school's for...to help people...that really need help.

Classroom Experience and the Development and Coordination of Knowledge Domains.

This paper has sketched out the three knowledge domains which appear to require coordination in the child's understanding of distributive justice in the classroom. Many important questions remain unanswered in this initial attempt to portray and schematize children's cognition. In closing, I will briefly mention three areas for further inquiry and conceptual development.

First, the currently undifferentiated category of resources needs to be examined, and divided into sub-categories which make sense from both a conceptual and a phenomenological point of view.

Secondly, although our basic theoretical leanings are cognitive-developmental, the model seeks to go beyond a bare-bones structuralism, and to include more substantive, content specific considerations than is often the case in cognitive-developmental research. The boundary between form and content in this model is unclear at this point, and needs to be further explored.

Finally, the way in which children in differing classroom environments talk about the distribution of resources needs to be examined. It is expected that the experience of different allocation patterns may have an impact on the knowledge schemas which exist and the coordination of these schemas. In addition to the direct experience of allocation, it may be that the social information which is available to students also affects their understandings of classroom distributions. Should this be the case, there may be a relationship between cumulative effects of the way in which instructional activity is organized -- or the pattern of classroom activity structures (Bossert, 1979) -- and the student's developing understanding of distributive justice in the classroom.

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